

REMARKS

The claims are 15 to 17.

The above amendment presents a new set of claims based in part on original claims 7 to 9.

The significance of these claims will be discussed in further detail below.

Support for new claim 15 is evident from the original claims, especially original claim 7 and the specification.

Support for new claims 16 and 17 is evident from original claims 8 and 9, respectively.

With regard to the objection to Figures 5 and 6, replacement drawings are submitted herewith.

The objection to the drawings states that it is unclear what the drawings are conveying and in reply, please see the top two paragraphs on page 4 of the present specification.

Further, Figures 5 and 6 are discussed on page 9 of the specification.

With regard to the comments concerning the Information Disclosure Statement filed on July 7, 2004, a new Information Disclosure Statement is submitted herewith with a legible copy of each cited reference.

The objection of claims 1 and 2 is moot in view of the cancellation of such claims.

The specification has been reviewed and has been found to be substantially idiomatic and in order. Nevertheless, amendments to the specification at page 1 is made.

With regard to the rejection of claims 1 to 6 under 35 U.S.C. § 112, first paragraph, for failure to comply with the written description requirement, the rejection states that Applicants' spectroscopy data would support a graphite sphere but that there is no evidence that Applicants have produced graphite spheres comprising "pyramids" that meet at an apex as claimed. In reply, such features can be seen from replacement Figures 5 and 6.

With regard to the rejection of claims 1 to 3 under 35 U.S.C. § 112, first paragraph, for failure to comply with the enablement requirement, submitted herewith is a Declaration Under 37 CFR 1.132 stating that RAMAN spectroscopy data indicates graphite with no space between the

layers i.e. that the referenced nanographite has graphene sheets that are closely packed (tightly arranged) due to van der Waals force.

With regard to the rejection of claims 10 to 14 under 35 U.S.C. § 112 (lack of enablement), this rejection is moot since there are no claims presently recited which correspond to claims 10 to 14.

With regard to the rejection of claims 1 to 6 as indefinite, the rejected terminology no longer appears and the rejected format is not present in the newly presented claims.

The rejections on prior art on pages 8 to 12 of the Official Action are respectfully traversed.

The parameter of the inert gas pressure is a very important factor herein in order to obtain the graphite nanospheres in a high yield. The desired graphite nanospheres cannot be produced in high yield under pressures not within the pressure range (5 to 10 atm) defined in the present claims.

Kokai et al. ("Laser vaporization synthesis of polyhedral graphite", Appl. Phys. A 77, 69-71 (2003), published after the filing date of this application), copy enclosed, shows that the graphite nanospheres cannot be produced in a high yield, if inert gas pressure is not high enough.

Iijima et al. ("Nano-aggregates of single-walled graphitic carbon nano-horns", Chemical Physics Letters, 309, 165-170 (1999), published before the filing date of this application), copy enclosed, shows that carbon nanohorns are produced at an inert gas pressure of 1 atm, and that the amorphous carbons are likely to be produced at an inert gas pressure lower than 1 atm.

The prior art rejections of claims 1 to 6 over Terrones et al., Ugarte, Osawa and Stroh are moot in view of the cancellation of these claims.

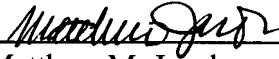
With respect to the rejection of claims 7 to 9 under 35 U.S.C. § 103(a) as being unpatentable over Journet, et al. in view of Bandow et al., as discussed above, the morphology of the carbon products is changed with the inert gas pressure. Neither Journet nor Bandow disclose or suggest such concepts and therefore, control of pressure cannot be an obvious result effective parameter for control of the morphology of graphite nanospheres. While Journet broadly mentions inert gas pressure as a parameter, it is not clear what the effect thereof is.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

Sumio IJIMA et al.

By: 
Matthew M. Jacob
Registration No. 25,154
Attorney for Applicants

MJ/aas
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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